

Supporting Information

Guerrero-Ferreira et al. 10.1073/pnas.1012388108

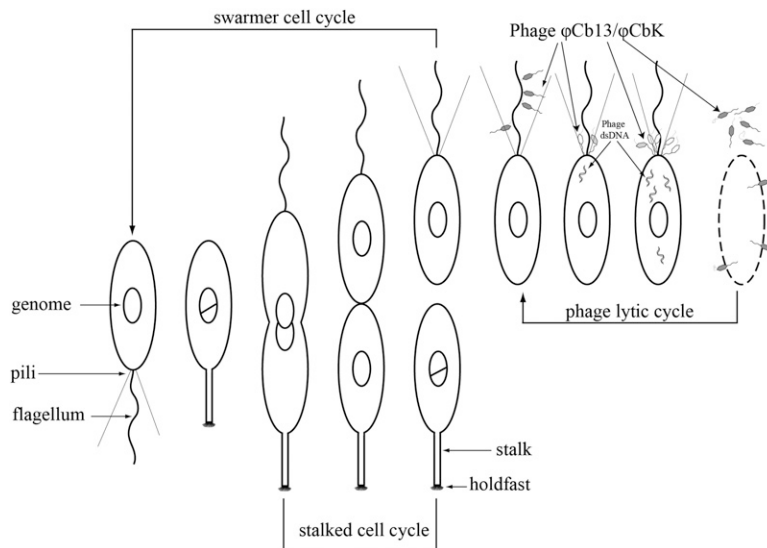


Fig. S1. Schematic representation of *Caulobacter crescentus* cell cycle including the proposed lytic cycle of phages ϕ Cb13 and ϕ CbK. Initial encounter with the bacterial host involves the adsorption of phage head filaments to *C. crescentus* flagellum. Rotation of the flagellum facilitates the attachment and subsequent injection of phage dsDNA, which initiates the formation of phage progeny.

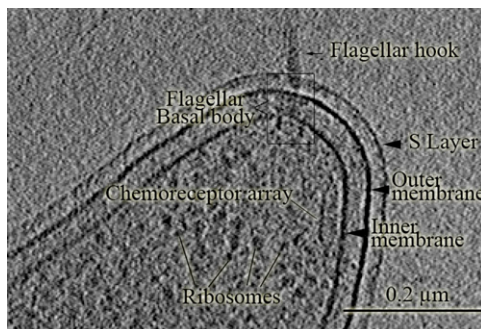


Fig. S2. Averaged (13-nm) slice through the middle of a tomographic reconstruction of the *C. crescentus* NA1000 cell pole. Bacterial cell components, including S-layer, outer and inner membranes, ribosomes, and flagellar basal body (enclosed density), are indicated. (Scale bar: 0.2 μ m.)

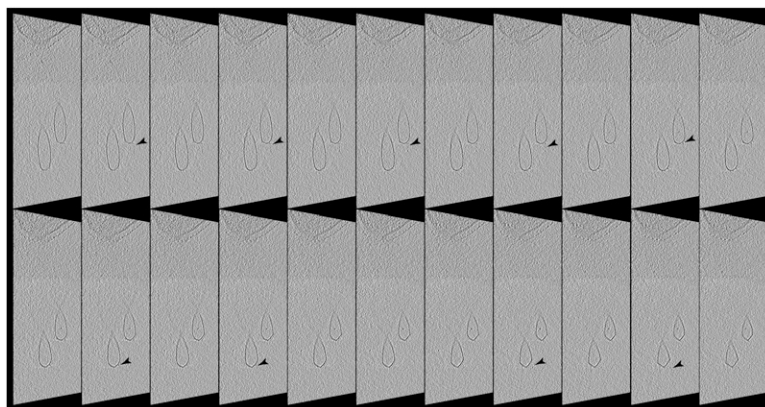
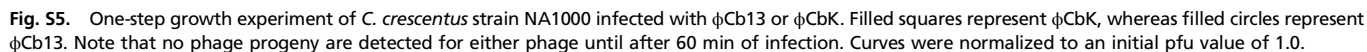
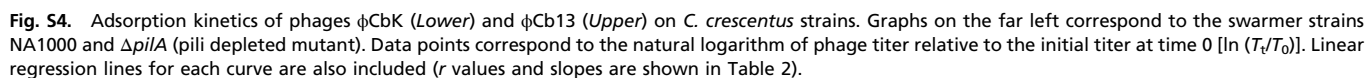
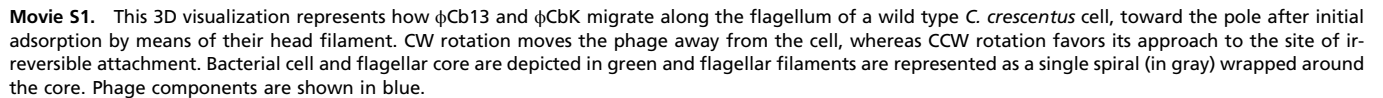


Fig. S3. Averaged (13-nm) slices of two ϕ Cb13 phage particles attached to a NA1000 *C. crescentus* cell (from Fig. 1). Head filaments are denoted by arrowheads in representative slices throughout the slice volume. The *C. crescentus* pole is visible at the top of each slice.





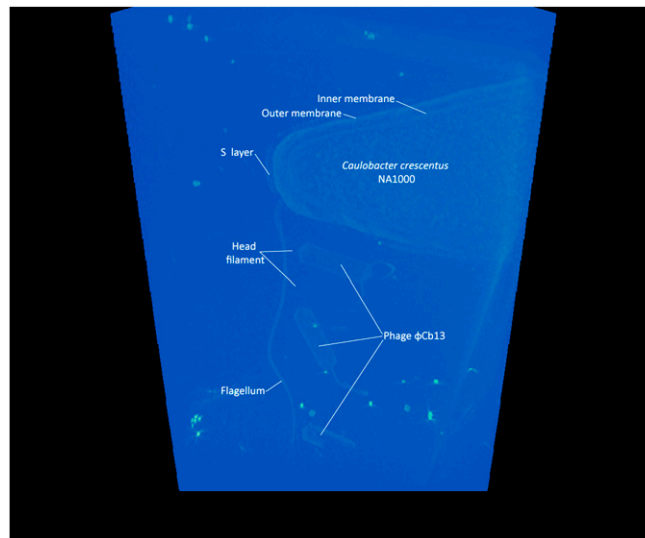
Movie S1





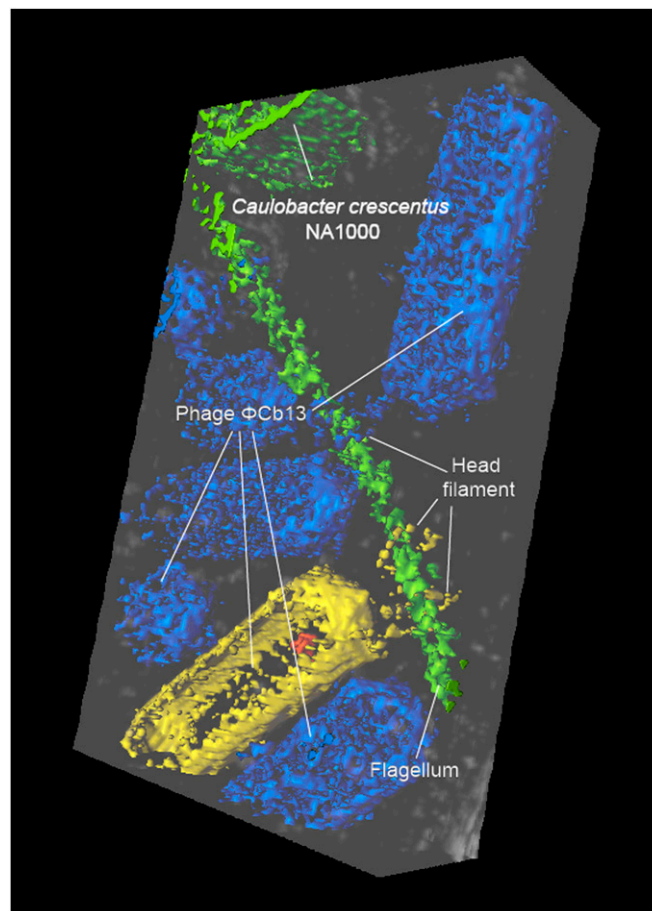
Movie S2





Movie S4. Movie of the automatically generated segmentation of the ϕ Cb13-infected NA1000 *C. crescentus* cell presented in Fig. 2A. Notice the head filaments that extend from the phage and wrap around the flagellum. Orange labeled densities inside yellow empty phages correspond to dislodged tail-head connectors. Full phages are depicted in blue and light aqua. The bacterial flagellum is presented in lime and the s-layer in green.

[Movie S4](#)



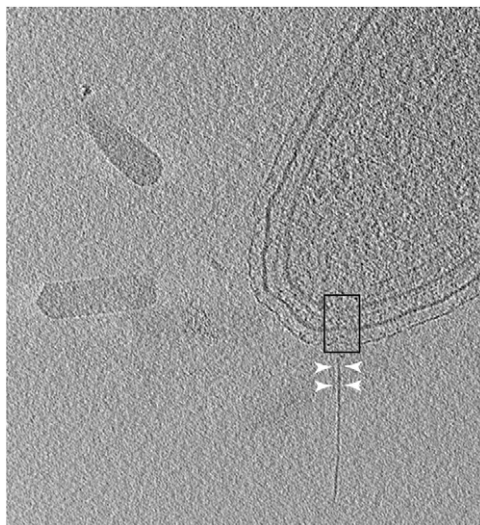
Movie S5. Movie of the automatically generated segmentation of the ϕ Cb13-infected NA1000 *C. crescentus* cell presented in Fig. 2B. Notice the head filaments that extend from the phage and wrap either once or twice around the flagellum. Orange labeled densities inside yellow empty phages correspond to dislodged tail-head connectors. Full phages are depicted in blue. The bacterial flagellum and cell pole are presented in green.

[Movie S5](#)



Movie S6. The movie displays a series of tomographic slices of a ϕ Cb13-infected WT *C. crescentus* cell (related to Fig. 2B). Components of the phage are clearly appreciated including capsid and tail lattices and head filaments, which wrap around the flagellum. Evident cell components include flagellar core and flagellar filaments, S-layer, outer and inner membranes, and the chemoreceptor array. Fiducial gold particles are 10 nm in diameter.

[Movie S6](#)



Movie S7. Movie of a series of tomographic slices of a ϕ Cb13-infected WT *C. crescentus* cell (related to Figs. 4 and 5). An area is observed in the movie where the interaction between the phage tail and the pilus portal is evident.

[Movie S7](#)